

April 13, 2018

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: Written Ex Parte Presentation: *Expanding Flexible Use in Mid-Band Spectrum  
Between 3.7 and 24 GHz*, GN Docket No. 17-183

Dear Ms. Dortch:

Intelsat License LCC (“Intelsat”) and SES Americom (“SES”) submit this letter in response to assertions made by Ericsson in its March 29, 2018 ex parte letter concerning the joint, market-based proposal of Intelsat, SES and Intel Corporation (“Intel,” and together with Intelsat and SES, the “Parties”) to make spectrum in the 3.7-4.2 GHz band available for mobile broadband use.<sup>1</sup>

The Parties propose to create a consortium of Fixed-Satellite Service (“FSS”) satellite operators (the “Consortium”) to clear and make available spectrum in the 3.7-4.2 GHz band for licensed terrestrial mobile service through secondary market agreements (“SMAs”) on a market-by-market basis, while maintaining and protecting critical satellite services. This market-based proposal would free up approximately 100 MHz of spectrum starting at 3700 MHz within 18 months to three years. Terrestrial mobile service providers would negotiate access to this spectrum through SMAs with the Consortium and then apply to the FCC for a Coordinated Mobile License authorizing terrestrial mobile service in the agreed-upon market area and spectrum block. In exchange for compensation, the Consortium would clear protected incumbent users and contractually relinquish primary protection in the portion of the band covered by the SMA.

From the beginning, the Parties have advocated for a market-based approach that employs appropriate regulatory backstops. That is why Ericsson’s assertion that the joint proposal would leave “critical decisions *solely* up to existing incumbents” is mistaken.<sup>2</sup> By leveraging market forces, the joint proposal provides the fastest, most efficient, voluntary means of freeing up spectrum for terrestrial use, while also retaining proper regulatory safeguards. The Parties have proposed terrestrial operators be able to enter an SMA with the Consortium and

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<sup>1</sup> Ex Parte Letter from Mark Racek, Senior Director Spectrum Policy, Government Affairs and Public Policy, Ericsson, *et. al.*, to Marlene H. Dortch, Secretary, Federal Communications Commission, GN Docket No. 17-183 (Mar. 29, 2018) (“Ericsson Ex Parte Letter”). Pursuant to FCC Rule 1.1206, Intelsat submits this letter for the record of this proceeding.

<sup>2</sup> *Ericsson Ex Parte Letter*, at 1-2.

apply to the Commission for a Coordinated Mobile License.<sup>3</sup> These Coordinated Mobile License applications will be public, providing transparency, accountability, and certainty to the process. The proposal also invites the Commission to seek comment after a set amount of time to review the progress made.<sup>4</sup>

Moreover, Ericsson's emphasis on updating the earth station database to determine the amount of spectrum that may be repurposed for mobile broadband use is misplaced.<sup>5</sup> It suggests that licensed or registered earth stations are the only incumbents that enjoy protection under the FCC's rules—ignoring the need to protect the satellite operators that have invested billions of dollars in C-band satellite assets that have at least 15-year lifespans. These FSS C-band satellite systems deliver myriad important services, including delivery of video and audio programming, communications for rural consumers, rapid restoration of communications services during emergencies, and support for government agencies. Ensuring their ability to continue providing these critical services must be one of the Commission's paramount goals.

Finally, Ericsson's contention that the 3.7-4.2 GHz band is not heavily used by satellites and its attempt to buttress it with data from Lyngsat concerning transponder usage data, is unpersuasive for several reasons.<sup>6</sup> First, averaging transponder usage across all C-band satellites serving the U.S. misses a critical point: not all C-band satellites are equal for the purpose of video distribution. Broadcast and cable distribution occurs on satellites at orbital locations that have 50-state coverage, and these satellites have very high fill factors. A U.S. broadcast or cable programmer cannot be moved to a C-band satellite in the Pacific Ocean region that sees only the U.S. West Coast because the coverage will be inadequate. Similarly, a U.S. broadcast or cable programmer cannot be moved to a C-band satellite at an orbit location without full ground segment penetration, i.e., where there are thousands of earth station antennas at every broadcast affiliate or cable headend in the country pointing at the orbital location in question. Second, it is not clear how Lyngsat accounts for transponders not currently in use because they are contracted for as back-ups for video distribution. Those transponders are "filled" transponders in the sense that a customer has paid for them to back up their primary transponders. Third, Lyngsat only looks at video services, ignoring data services.<sup>7</sup>

Nor are fiber services a substitute for FSS, particularly for nationwide point-to-multipoint distribution such as is required for video programming distribution. As commenters explained in response to the Commission's Notice of Inquiry in this proceeding, satellite remains the most cost effective and reliable way to distribute audio and video programming and other content, especially in rural and topographically challenging areas.<sup>8</sup> Fiber coverage and other alternatives

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<sup>3</sup> See SES and Intelsat License LLC Notice of Ex Parte Presentations, GN Docket No. 17-183, at 4-5 (filed Feb. 9, 2018).

<sup>4</sup> *Id.*

<sup>5</sup> See *Ericsson Ex Parte Letter*, at 2.

<sup>6</sup> See *id.*, at 2-3.

<sup>7</sup> For example, AMC-8 is loaded at 85% for Alaskan service, but Lyngsat shows less than one transponder in use (4% load). *AMC 8 at 139*, Lyngsat.com, available at <https://www.lyngsat.com/AMC-8.html>.

<sup>8</sup> See e.g., Comments of the American Cable Association, GN Docket No. 17-183, at 16-18 (filed Oct. 2, 2017); Comments of AT&T Inc., GN Docket No. 17-183, at 7 (filed Oct. 2, 2017); Reply Comments of General

to C-band satellite service are not currently adequate or cost effective. For example, given the video industry's need for high reliability, redundant fiber links would be required to every receive site.

Most importantly, the Parties' approach allows the market—not government or third-party interests—to determine the highest and best use of the spectrum. To the extent that the market places a higher demand on terrestrial mobile use, as Ericsson suggests, then satellite operators will be incentivized to make spectrum available. This will occur, however, in a time frame and manner that allows satellite operators to ensure that their existing customers' businesses -- including the distribution of video programming to over 100 million TV households -- will be protected. Indeed, the projections that Ericsson cites as support for its assertion that C-band transponder demand “is declining” cover the time period *through 2026* from a high base figure.<sup>9</sup> If these projections ultimately prove to be accurate, then Ericsson and other companies interested in 5G should have no concern that – over time – additional spectrum would be cleared for terrestrial mobile use in a manner that protects satellite customer service.

Intelsat and SES remain committed to working with the FCC and other stakeholders to discuss the details of how the proposal would be implemented. To advance these discussions, the Parties encourage the Commission to move forward expeditiously on a Notice of Proposed Rulemaking that would implement the joint proposal.

Respectfully submitted,

/s/ Susan H. Crandall

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Associate General Counsel  
Intelsat Corporation

/s/ Gerald E. Oberst

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President  
SES Americom, Inc.

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Communications, Inc., GN Docket No. 17-183, at 14-15 (filed Nov. 15, 2017); Reply Comments of the National Association of Broadcasters, GN Docket No. 17-183, at 2-3 (filed Nov. 14, 2017); Reply Comments of The Commonwealth of Massachusetts Department of State Police, GN Docket No. 17-183, at 2 (filed Nov. 15, 2017).

<sup>9</sup> *Ericsson Ex Parte Letter*, at 2.